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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/733,611	12/08/2000	Waheguru Pal Singh	LYNN/0120	4196
24945	7590	04/13/2005	EXAMINER	
STREETS & STEELE 13831 NORTHWEST FREEWAY SUITE 355 HOUSTON, TX 77040			QAZI, SABIHA NAIM	
			ART UNIT	PAPER NUMBER
			1616	

DATE MAILED: 04/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/733,611	Applicant(s) SINGH ET AL.	
	Examiner Sabiha Qazi	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 17, 26-38, 40-49 and 51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 17, 26-38, 40-49 and 51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Final Rejection

Claims 1-10, 17, 26-38, 40-49, and 51 are pending. No claim is allowed.
Amendments are entered.

Response to Remarks

- The 112 rejection is withdrawn, as claims are canceled.
- The double patenting rejection is withdrawn, as arguments are found persuasive.
- The 102 rejections are withdrawn, as arguments are found persuasive and claims are amended.
- The 103 rejections are maintained for the same reasons as set forth in the previous Office Action, as arguments are not found persuasive.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1-10, 17 and 26-38, 40-49, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over OAKES et al and PLOUMEN et al. Both references teach dipercarboxylic acid compositions, which embrace the Applicant's claimed invention. See the entire documents, especially the cited sections below.

OAKES et al teaches peroxyacid antimicrobial concentrates for sanitizing surfaces, facilities, and equipment found in food manufacturing and food processing and food service industries, and typically hard non-porous surfaces in the health care industry.

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(See lines 10-15 in col. 1) Furthermore, OAKES et al teaches diperoxydicarboxylic acid aqueous compositions. See the entire document, especially the examples and claims (*especially* claim 2).

PLOUMEN et al teaches a process for the preparation of organic peroxyacid containing bleaching granules or powder. (See lines 45-47 in col. 2) Furthermore, PLOUMEN et al lists preferred diperoxy acids in lines 60-68 in col. 4 and 1-8 in col. 5. See the entire document, especially the examples, the claims, and Tables I and II.

The instant invention differs from the prior art in that the presently claimed invention is using the dipercarboxylic acid in solid form and using it as a sterilant in aqueous form while the prior art teaches the same aqueous composition for use as peroxyacid antimicrobial concentrates for sanitizing surfaces, facilities, and equipment found in food manufacturing and food processing and food service industries, and typically hard non-porous surfaces in the health care industry (OAKES et al). The prior art teaches the solid form of peroxyacids in the form of granules or powder (PLOUMEN et al).

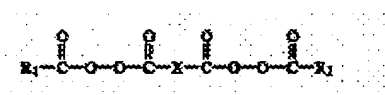
2. Claims 1-10, 17 and 26-38, 40-49, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over LAGNEMO et al¹. The prior art teaches a bleaching agent of Formula I, which is a dipercarboxylic acid. This bleaching agent is stable during storage. It gives a satisfying yield of percarboxylic acids in aqueous solutions and can be used without or with less supply of hydrogen peroxide than bleaching agents presently available. The agent should have capability to generate percarboxylic acids with a suitable rate to achieve a constant concentration during a whole washing cycle, and be

¹ United States Patent No. 5415668, filed on November 6, 1992.

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compatible with other components in a detergent. Finally, it is desirable that it is harmless and inexpensive. In order to stabilize against decomposition catalyzed by metal cations, such as Cu^{2+} , Mn^{2+} or Fe^{3+} , the composition may also contain small amounts of sequestering agents, such as EDTA, NTA, dipicolinic acid, or phosphonates, for example Dequest 2010.RTM., Dequest 2016.RTM. or Dequest 2040.RTM., preferably in amounts from 0.1 to 1% by weight, and optionally in combination with magnesium silicate. Compositions according to the prior art are useful for all kinds of bleaching in alkaline environment, in which bleaching means oxidative decomposition of chromophoric systems, which regarding peracids probably is due to the oxidation of conjugated double bonds. The composition is specifically advantageous at bleaching in combination with cleaning, especially at washing of textiles, in which case a good bleaching effect is obtained at such low temperatures as 20 degrees Celsius. See the entire document, especially lines 45-62 in col. 1, lines 25-32 in col. 7, lines 52-60 in col. 7, and lines 7-17 in col. 9.

Instant claims differ from the reference in generating dipercarboxylic acids by using the compounds of Formula I, cited below.



Formula I

In the instant invention, Applicants are using dipercarboxylic acids for the preparation of the composition. All ingredients of the compositions as presently claimed are taught by the prior art.

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The complete composition is given in the Table in lines 7-17 in col. 9. A copy of this table is cited below:

diacylated dipercarboxylic acids	1-10
perborate	5-13
anionic surfactants	5-30
nonionic surfactants	2-11
soaps	0,1-4
sequestering agents	0,1-1
fillers	16-30
zeolites	10-45
polycarboxylates	3-5
sodium carbonate	5-13

Table in Lines 7-17 of Column 9

It would have been obvious to one skilled in the art at the time of invention to prepare additional beneficial compositions in solid or aqueous form because the prior art teaches it for the reasons cited above.

Examiner notes that .1 weight percent is used in claim 1. Even if OAKES et al did not teach or suggest this, it has been established by the courts merely selecting proportions and ranges is not patentable absent a showing of criticality. In re Becket, 33 U.S.P.Q. 33 (C.C.P.A. 1937). In re Russell, 439 F.2d 1228, 169 U.S.P.Q. 426 (C.C.P.A. 1971).

Normally, change in temperature, concentration, or both, is not a patentable modification; however, such changes may impart patentability to a process if the ranges claimed produce a new and unexpected result which is different in kind and not merely in degree from results of prior art; such ranges are termed "critical" ranges, and applicant has burden of proving such criticality; even though applicant's modification results in

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great improvement and utility over prior art, it may still not be patentable if the modification was within the capabilities of one skilled in the art; more particularly, where the general conditions of the claim are disclosed in the prior art, it is not inventive to discover optimum or workable ranges by routine experimentation. *In re Aller et al.* 105 USPQ 233.

Furthermore, it has been established by the courts that a reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill might reasonably infer from the teachings. *In re opprecht* 12 USPQ 2d 1235, 1236 (Fed Cir. 1989); *In re Bode* 193 USPQ 12 (CCPA 1976). A reference is not limited to working examples. *In re Fracalossi* 215 USPQ 569 (CCPA 1982).

Accordingly, the burden of proof is upon applicants to show that instantly claimed subject matter is different and unobvious over those taught by prior art. See *In re Brown*, 173 USPQ 685, 688; *In re Best*, 195 USPQ 430 and *In re Marosi*, 218 USPQ 289, 293.

In the light of the forgoing discussion, the Examiner's ultimate legal conclusion is that the subject matter defined by the instant claims would have been obvious within the meaning of 35 U.S.C. 103(a).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sabiha Qazi whose telephone number is (571) 272-0622. The examiner can normally be reached on any business day.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz can be reached on (571) 272-0887. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SABIHA QAZI, PH.D.
PRIMARY EXAMINER

Saturday, April 9, 2005